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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/334,104	06/16/1999	GALEN C. HUNT	MS1-354US	4938

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EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 09/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/334,104

Applicant(s)

HUNT ET AL.

Examiner

Charles E Anya

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 23 and 29 - 41 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,379,432 to Orson.

As to claim 29, Orton teaches an Operating System Application Interface (Wrapper 128, wrapper 129), a Computer-Readable Medium (Ram 108, Data Storage Device 120, 122, Col. 6, Ln. 41 – 68), a Plurality of Object Interfaces (Wrapper 128, wrapper 129, API Interfaces, Col. 21, Ln. 21 – 24), One or More Methods (“...a method...”, Col. 8, Ln. 16 – 50) and Call Functions (“...procedural function call...”, Col. 34 – 50).

As to 30, Orton teaches Object interfaces arranged in groups in accordance with the types of objects with which their operation is associated (“...wrapper class library 402...”, Col. 21, Ln. 21 – 24).

As to claim 31, Orton teaches the method of some of the interfaces that are arranged in accordance with whether they create an object (Step 208, “...the method...”, Col. 8, Ln. 34 – 49, Note, the method that includes a procedural function call is used provide services to the application. These services can be thread services (Col. 12, Ln. 10 – 15).

As to claim 32, Orton teaches the method of some of the interfaces that are arranged in accordance with whether they do not create an object (Col. 12, Ln. 14 – 15).

As to claim 33, Orton teaches the method of some of the interfaces that are arranged in accordance with whether they operate upon an object (“...address space...”, Col. 12, Ln. 35 – 46).

As to claim 34, see the rejection of claim 24.

As to claim 35, see the rejection of claim 25.

As to claim 36, Orton teaches a Plurality of programming Objects (“...wrapper class library 402, Col. 21, Ln. 21 – 24), Interfaces (“API interfaces...”, Col. 21, Ln. 21 – 24), Operating System Resource (“threads, tasks, virtual memory, interprocess communication IPC, Scheduling, synchronization, fault processing and host/processor set processing, Col. 7, Ln. 31 – 34), programming object configured to be called either directly or indirectly by an application (Wrapper 128, Col. 6, Ln. 41 – 45) and the methods are configured to call operating system functions responsive to being called directly or indirectly by an application (Step 208, Col. 8, Ln. 34 – 49).

As to claim 37, see the rejection of claim 6.

As to claim 38, see the rejection of claim 7.

As to claim 39, see the rejection of claim 23.

As to claim 40, see the rejection of claim 26.

As to claim 41, claim 36 meets claim 41 except for calling a programming object interface and calling an operating system function with a method of the programming object.

Orton teaches calling a programming object interface (Wrapper 128, Col. 6, Ln. 41 – 45) and calling an operating system function with a method of the programming object (Step 210, Col. 8, Ln. 47 – 49).

As to claim 1, Orton teaches Criteria (“...services...”, Col. 7, Ln. 31 – 37), factoring the functions into one or more groups based upon the criteria (Threads, Tasks, Virtual Memory, Interprocess Communication Scheduling, Synchronization, Fault Processing and Host/Processor set processing, Col. 7, 31 – 37), an Operating System (Operating System 114) and associating groups of functions with programming objects that have data and methods (“...class library 402...”, Col. 7, Ln. 35 – 37, Code Library 110, Col. 6, Ln. 58 – 68, Col. 7, Ln. 1 – 12).

As to claim 2, Orton teaches Interfaces (Wrapper 128, Wrapper 129, Col. 6, Ln. 41 – 57).

As to claim 3, see the rejection of claim 26.

As to claim 4, see the rejection of claim 24.

As to claim 5, a Hierarchy of object interfaces (Task Classes 404, Thread Classes 406 Col. 7, Ln. 38 – 48, Threads Col. 11, Ln. 25 – 29)

As to claim 6, Orton teaches a Plurality of Programming Objects (Step 208, Note, in the process of translating to a procedural functional call from object-oriented statement it is inherent to instantiate the objects) and a Process Boundary (Application 130A, Operating System 114. Note, the process boundary is between application 130A and Operating System 114).

As to claim 7, Orton is silent with respect to instantiating a plurality of programming objects across a machine boundary. However, it would have been obvious to one of ordinary skill to make this modification to provide objects that communicate across machine boundary.

As to claim 8, Orton teaches the criteria based at least in part, on the manner in which particular function behaves (“...executable entity...”, Col. 11 Ln. 25 – 35, Task, Col. 12, Ln. 35 – 67).

As to claim 9, Orton teaches consideration of the type of operating system resources that are associated with the operation of a function (Step 210, Col. 8, Ln. 43 - 49).

As to claim 10, Orton teaches consideration of whether a particular function creates an operating system resource (Col. 12, Ln. 10 – 15).

As to claim 11, Orton teaches consideration of whether a particular function operates upon an operating system resource (Col. 12, Ln. 40 – 44).

As to claim 12, see the rejection of claims 8 – 11.

As to claim 13, see the rejection of claims 8 – 11.

As to claim 14, Orton teaches a Plurality of operating system functions (Threads, Tasks, Col. 7, 31 – 37), First Group (“...task...”, Col. 11, Ln. 26 – 29), First Criteria (Col. 12, Ln. 40 – 42), Sub-Group (Col. 11, Ln. 26 – 29), Second Criteria (Col. 11, Ln. 25 – 67), assigning each sub-group to its own programming object interface (Wrapper 128, Col. 9, Ln. 25 – 31, Col. 7, Ln. 35 – 37, Col. 6, Ln. 41 – 67).

As to claim 15, Orton teaches the first criteria based upon the type of resource that is associated with an operation of a function (“...threads...”, “...address space...”, “...port name space...”, Col. 12, Ln. 35 – 44).

As to claim 16, Orton teaches the second criteria based upon the nature of an operation of a function on a particular resource (“...executable entity...”, Col. 11, Ln. 25 – 35).

As to claim 17, Orton teaches nature as having concerns as to whether a function creates a resource (Col. 12, Ln. 10 – 14).

As to claim 18, Orton teaches nature as having concerns as to whether a function does not create a resource (Col. 12, Ln. 14 – 17, Note, a terminated thread does implicitly not create a resource).

As to claim 19, see the rejection of claims 15 – 16.

As to claim 20, see the rejection of claim 24.

As to claim 21, see the rejection of claim 5

As to claim 22, see the rejection of claim 6.

As to claim 23, see the rejection of claim 6 – 7.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 24 - 28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,144,377 to Oppermann et al.

As to claim 24, Oppermann teaches a Plurality of operating system functions ("...a number of functions...", Col. 8, Ln. 63 – 67), Interfaces Groups (Dialog Interface Class 602, Col. 7, Ln. 42 – 63, "...user interface element...", "...IAccessible interface...", Col. 8, Ln. 63 – 67), Interface Sub-Group (Dialog Interface Class, Edit Interface Class, Button Interface, Col. 9, Ln. 26 – 30, Col. 9, Ln. 50 – 67), a Handle ("...window handle...", Col. 9, Ln. 14 – 49), a Resource ("...window...", Col. 8, Ln. 24 – 29) and organizing the interface sub-groups so that at least one of the interface sub-groups inherits from at least one other of the interface of the interface sub-groups ("...parent and grandparent...", Col. 23, Ln. 48 – 57, Note, This is to show that interface sub-group can inherit from other interface sub-group).

As to claim 26, Oppermann teaches COM Objects (OLE Interfaces, Col. 10, Ln. 8 – 10).

As to claim 25, see the rejection of claim 5.

As to claim 27, Oppermann teaches a Handle (Col. 8, Ln. 26 – 29).

As to claim 28, see the rejection of claims 25 and 27.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

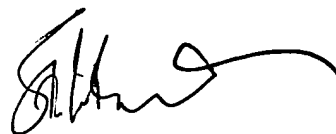
U.S. Pat. No. 5,097,533 to Burger et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M – F (First Friday Off) from 8:30 am to 5:30 pm.

The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Charles E Anya
Examiner
Art Unit 2151



ST. JOHN COURTENAY III
PRIMARY EXAMINER